



# CUSD Technology Benchmarks

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The skills listed in each column are the technology benchmarks that students are expected to acquire at each grade level. Teachers may address additional technology skills with their students if they wish, but the technology benchmarks listed are the minimum standards for all grade levels.

As you plan to address your grade level's technology benchmarks, please keep the following in mind:

- Ready-made lessons are available that integrate many of these technology benchmarks into the curriculum. Visit <http://www.cupertino.k12.ca.us/math> to see the lessons that have been created by CUSD teachers and staff for various subject areas and grade levels.
- Training for teachers addressing specific technology can be provided by the district's technology resource teacher. Training is provided through catalog courses, at CTTA sessions (visit <http://www.cupertino.k12.ca.us/ctta> for details), and can also be arranged at school sites during Learning Days, after school, or during the school day (if the site releases a teacher with a substitute).
- A teacher can also get support and information from the Instructional Technologies website located on the CUSD website:  
<http://cupertino.k12.ca.us/home/Technology/Instructional+Technologies>
- A schedule of classes can also be found at the district Intranet: <http://do-intranet/>



## CUSD Technology Benchmarks — Kindergarten

In Kindergarten, students may need some teacher one-on-one facilitation with these benchmark skills.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	1) Use the mouse to click and double-click. 2) Use the keyboard.		Be introduced to printing (as per school policy).				
<b>Research Skills</b>				Launch and use interactive software such as Reader Rabbit, Math Rabbit, interactive books, etc.			

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof-Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Investigate graphing in a whole group setting with a program such as Graph Club or Graphers where the teacher creates a whole group graph with student input.		Use the SuperGrouper (jar) tool to organize data into a category (if Kidspiration is available).				
<b>Publishing and Composing Skills</b>				Use an appropriate application to enter text into the computer.		Experiment with drawing tools to create a picture.	



## CUSD Technology Benchmarks — Grade 1

In Grade 1, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	1) Be introduced to the insertion point and how to move the insertion point with the mouse. 2) Use relevant keys on the keyboard, including shift, space bar, return, delete, and arrows.	Be introduced to saving and retrieving files to/from the appropriate folder on the server or hard drive.	Be able to print with teacher assistance (as per school policy).				
<b>Research Skills</b>				Be able to launch and navigate within appropriate software.		Experience an appropriate website with teacher guidance.	

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof-Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Organize data with a program such as Graph Club or Graphers as a whole group and/or with teacher assistance after teacher demonstration.		Brainstorm and observe the teacher creating an electronic mind-map and see their brainstorming results printed (if software such as Kidspiration or Inspiration is available).				
<b>Publishing and Composing Skills</b>				Be introduced to basic word processing and be able to write simple words and/or sentences as appropriate.		Use basic drawing tools (line, shapes, eraser, paint brush, and spray can) to create an assigned picture.	



## CUSD Technology Benchmarks — Grade 2

In Grade 2, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	1) Highlight text using the mouse or Select All.  2) Continue to use relevant keys on the keyboard and start to apply basic keyboarding skills (using both hands on both sides of the keyboard).	Be introduced to logging onto the server. Independently retrieve appropriate files. Continue to save to the server or hard drive with some accuracy.	Independently print (as per school policy).				
<b>Research Skills</b>				Be able to open and search for information and/or activities on appropriate software.	Be introduced to the on-line database (SIRS or Groliers) and the on-line encyclopedia (Worldbook).	1) Responsibly navigate within an appropriate website.  2) Use teacher-created bookmarks to find information.	Cite the URL, the title of the website (if available), and the access date in their bibliography. Be introduced to the concept of plagiarism.



## CUSD Technology Benchmarks — Grade 2

In Grade 2, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Turn survey data into graphs using a program such as Graph Club or Graphers.		As a class with the teacher facilitating, organize data into electronic mind-maps (if software such as Kidspiration or Inspiration is available).				
<b>Publishing and Composing Skills</b>				<p>1) Use basic word processing skills to type a paragraph. Learn to use the tab key to indent and understand the concept of word wrap.</p> <p>2) Be introduced to common formatting and editing functions such as font, style, and size.</p>		<p>1) Use basic drawing tools (line, shapes, eraser, paint brush, and spray can) to illustrate stories, math concepts, science concepts, and/or social studies concepts.</p> <p>2 ) Be introduced to importing graphics and to resizing or reshaping graphics using the edge handles.</p>	Be introduced to the components of a multimedia program (e.g., PowerPoint, HyperStudio, web page, etc.).



## CUSD Technology Benchmarks — Grade 3

In Grade 3, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	<p>1) Be familiar with highlighting text and be introduced to cut, copy, and paste functions.</p> <p>2) Start formal keyboarding instruction (using both hands and both sides of the keyboard).</p>	Be able to log onto the server, retrieve appropriate files, and save files in the appropriate place.	Independently print and learn how to read/use the print dialogue box when printing (as per school policy).				
<b>Research Skills</b>				Continue to navigate within appropriate software to search for information and/or activities.	Use the on-line database (SIRS or Groliers) and the on-line encyclopedia (Worldbook) to gather information.	<p>1) Responsibly use search engines in teacher-directed lessons to find information. Be introduced to keyword search techniques</p> <p>2) Input URLs and know how to use and add bookmarks.</p>	Cite the URL, the title of the website (if available), and the access date in their bibliography. Continue to discuss the concept of plagiarism.



## CUSD Technology Benchmarks — Grade 3

In Grade 3, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Create appropriate graphs/charts based on collected information using a program such as Graph Club or Graphers or a spreadsheet program; and be able to interpret and organize information using these graphs/charts.	Be introduced to reading a spreadsheet or table.	Use mind-mapping software to organize data into electronic mind-maps (if software such as Kidspiration or Inspiration is available).				
<b>Publishing and Composing Skills</b>				<p>1) Use basic word processing skills to type multiple paragraphs. Understand word wrap and be able to use the tab key to indent. Understand how to highlight text and insert/delete text.</p> <p>2) Become familiar with common formatting and editing functions (font, style, and size). Become familiar with the tab key and the alignment tools.</p>	Be introduced to proofreading work using a spell checker (if available), saving changes to their original documents.	<p>1) Use basic drawing tools (line, shapes, eraser, paint brush, and spray can) to illustrate a concept in the curriculum.</p> <p>2) Become familiar with importing graphics and resizing or reshaping graphics using the edge handles.</p>	Use a multimedia template and/or be introduced to using a multimedia application in presentations and/or reports (e.g., PowerPoint, HyperStudio, web page, etc.).



## CUSD Technology Benchmarks — Grade 4

In Grade 4, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	<p>1) Be able to highlight text and use cut, copy, and paste functions from one application to another.</p> <p>2) Continue formal keyboarding and type at 15 wpm with 95% accuracy without looking at the keyboard.</p>	Independently log onto the server, retrieve appropriate files, and save files in the appropriate place.	Independently print and use the print dialogue box (as per school policy). Be introduced to changing the page setup for printing purposes and to using the print preview before printing.				
<b>Research Skills</b>				Independently navigate within appropriate software to search for information and/or activities.	Continue to use the on-line database (SIRS or Groliers) and the on-line encyclopedia (Worldbook) to gather information.	<p>1) Responsibly search the Internet using multiple search engines and keyword searches. Further develop search techniques.</p> <p>2) Know how to input URLs and use, add, and delete bookmarks.</p>	Use appropriate citations while researching on the Internet, create a simple bibliography, and understand the concept of plagiarism.



## CUSD Technology Benchmarks — Grade 4

In Grade 4, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Create graphs/charts from simple numerical data in a spreadsheet and be able to interpret and organize information using these graphs/charts.	Enter data into a spreadsheet and then read and interpret the data.	Use mind-mapping software to independently organize ideas within the curriculum (if software such as Kidspiration or Inspiration is available).				
<b>Publishing and Composing Skills</b>				<p>1) Use basic word processing skills to type multiple paragraphs. Be able to independently use the tab key and highlight, insert, and delete text.</p> <p>2) Understand how to use common formatting and editing functions (font, style, and size) and how to change formats of text using the margins and tabs.</p>	Become familiar with proofreading work using a spell checker (if available), saving changes to their original documents.	<p>1) Use basic (line, shapes, eraser, paint brush, spray can) and be introduced to other (patterns, fills, rotate) drawing tools to illustrate concepts in the curriculum.</p> <p>2) Independently import, resize, and reshape graphics.</p>	Create a simple multimedia project independently (e.g., PowerPoint, HyperStudio, web page, video, iMovie, etc.).



## CUSD Technology Benchmarks — Grade 5

In Grade 5, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	<p>1) Independently highlight text and use cut, copy, and paste functions from one application to another.</p> <p>2) Continue formal keyboarding and type at 18 wpm with 95% accuracy without looking at the keyboard.</p>	Independently log onto the server, retrieve appropriate files, and save files in the appropriate place.	Independently print and use the print dialogue box (as per school policy). Be familiar with changing the page setup for printing purposes and using the print preview before printing.				
<b>Research Skills</b>				Independently navigate within appropriate software to search for information and/or activities.	Independently use the on-line database (SIRS or Groliers) and the on-line encyclopedia (Worldbook) to gather information.	<p>1) Responsibly search the Internet effectively using multiple search engines and search techniques. Determine the reliability of the content.</p> <p>2) Independently input URLs and use, add, and delete bookmarks.</p>	Continue to use appropriate citations while researching on the Internet, create a standard bibliography, and understand the concept of plagiarism.



## CUSD Technology Benchmarks — Grade 5

In Grade 5, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Create graphs/charts from numerical data in a spreadsheet, explore/produce different types of graphs, and be able to interpret and organize information using these graphs/charts.	Enter data into a spreadsheet and then read, sort, and interpret the data.	Use mind-mapping software to convert mind-maps to outline forms to put ideas in logical or sequential order (if software such as Inspiration is available).				
<b>Publishing and Composing Skills</b>				<p>1) Use basic word processing skills to type multiple paragraphs. Be able to independently use the tab key and highlight, insert, and delete text. Understand how to import graphics into the document.</p> <p>2) Independently use common formatting and editing functions (font, style, and size) to edit and revise a rough draft. Independently be able to change the formats of text using the margins and tabs.</p>	Independently proofread work using a spell checker (if available), saving changes to their original documents.	<p>1) Use basic (line, shapes, eraser, paint brush, and spray can) and other (patterns, fills, rotate) drawing tools to illustrate concepts in the curriculum.</p> <p>2) Independently import, resize, and reshape graphics. Be introduced to exporting graphics to other applications.</p>	Create a multimedia project or video incorporating sound, graphics, and text (e.g., PowerPoint, HyperStudio, web page, video, iMovie, etc.).



## CUSD Technology Benchmarks — Grade 6

In Grade 6, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	<p>1) Independently highlight text and use cut, copy, and paste functions from one application to another.</p> <p>2) Continue formal keyboarding and type at 20 wpm with 95% accuracy without looking at the keyboard.</p>	Independently log onto the server, retrieve appropriate files, and save files in the appropriate place.	Independently print, use the print dialogue box, change the page setup for printing purposes, and use the print preview before printing. (as per school policy)				
<b>Research Skills</b>				Independently navigate within appropriate software to search for information and/or activities.	Independently use the on-line database (SIRS, Groliers, or Newsbank) and the on-line encyclopedia (Worldbook) to gather information.	<p>1) Responsibly search the Internet independently and effectively using multiple search engines and search techniques. Determine the reliability of the content.</p> <p>2) Independently input URLs and use, add, and delete bookmarks.</p>	Continue to use appropriate citations while researching on the Internet, create a standard bibliography, and understand the concept of plagiarism.



## CUSD Technology Benchmarks — Grade 6

In Grade 6, students will demonstrate these benchmark skills with little or no teacher facilitation.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Create various types of graphs/charts from numerical data in a spreadsheet.	1) Independently create spreadsheets and use them for reports and projects. 2) Be introduced to simple functions in spreadsheets (average and sum).	Use the outline form of mind-mapping software (if software such as Inspiration is available) or a word processing program to complete a writing assignment.				
<b>Publishing and Composing Skills</b>				1) Be able to independently use the tab key, and highlight, insert, and delete text. Publish a research report that includes imported graphics.  2) Demonstrate common (font, style, and size) and advanced formatting and editing functions such as page numbers. Independently be able to change the formats of text using the margins and tabs.	Use the spell checker and thesaurus (if available) to proofread work and save changes to original documents.	1) Independently use basic (line, shapes, eraser, paint brush, and spray can) and other (patterns, fills, rotate) drawing tools to illustrate concepts in the curriculum.  2) Independently import, resize, and reshape graphics. Become familiar with exporting graphics to other applications.	Create a multimedia project with sound, graphics, text, animation, video clips, and/or Internet links (e.g., PowerPoint, HyperStudio, web page, video, iMovie, etc.).



## CUSD Technology Benchmarks — Grades 7 and 8

In Grades 7 and 8, students will independently demonstrate these benchmark skills.

	<b>Keyboarding</b>	<b>Saving</b>	<b>Printing</b>	<b>Navigation</b>	<b>Electronic Resources</b>	<b>Internet</b>	<b>Citation</b>
<b>Computer Literacy Skills</b>	1) Independently highlight text and use cut, copy, and paste functions from one application to another. 2) Type at a minimum of 20 wpm with 95% accuracy without looking at the keyboard.	Independently log onto the server, retrieve appropriate files, and save files in the appropriate place.	Independently print, use the print dialogue box, change the page setup for printing purposes, and use the print preview before printing. (as per school policy)				
<b>Research Skills</b>				Independently navigate within appropriate software to search for information and/or activities.	Compile information from a variety of electronic media sources for a research project, including the on-line database (Newsbank) and on-line encyclopedia (Worldbook).	1) Responsibly search the Internet independently and effectively using multiple search engines and search techniques. Begin to discern bias and reliability of websites and critically evaluate the quality and reliability of the content. 2) Independently input URLs and use, add, and delete bookmarks.	Cite all sources in a standard bibliography and understand the concept of plagiarism.



## CUSD Technology Benchmarks — Grades 7 and 8

In Grades 7 and 8, students will independently demonstrate these benchmark skills.

	<b>Graphs/ Charts</b>	<b>Spread sheets</b>	<b>Mind-Maps &amp; Outlines</b>	<b>Word Processing</b>	<b>Proof- Reading</b>	<b>Graphics</b>	<b>Multimedia</b>
<b>Data Organization Skills</b>	Use spreadsheets (and graphing calculators, if available) to analyze, organize, and graph numerical information.	1) Independently create and use spreadsheets to organize and analyze information in a given subject area. 2) Use functions and formulas in spreadsheets to summarize numerical data in a given subject area.	Use mind-mapping software (if software such as Inspiration is available) to create a mind-map to organize concepts and ideas on a topic and to analyze connections and correlations among ideas.				
<b>Publishing and Composing Skills</b>				1) Be able to independently use the tab key, and highlight, insert, and delete text. Demonstrate advanced word processing skills to publish a project that incorporates imported graphics. 2) Demonstrate advanced formatting and editing functions such as footnotes, headers/footers, and other advanced functions to make their documents functionally more professional.	Use the spell checker, thesaurus, and grammar checker (if available) to proofread work and save changes to original documents.	Independently use basic (line, shapes, eraser, paint brush, and spray can) and other (patterns, fills, rotate) drawing tools to illustrate concepts in the curriculum and export them into other applications.	Create a multimedia presentation with sound, graphics, text, animation, video clips, Internet links, and special effects.